



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

Reply To
Attn Of: ECL-113

August 5, 1999

Ms. Katie Hain, Manager
Environmental Restoration Program
U.S. Department of Energy
Idaho Operations Office
785 DOE Place
Idaho Falls, Idaho 83402

Re: Review of Draft Final Record of Decision (ROD) for O.U. 3-13,
Idaho Chemical Processing Plant.

Dear Ms. Hain:

We have reviewed the draft Final Record of Decision (ROD) for the Idaho Chemical Processing Facility received July 21, 1999. Our major comments are contained in the enclosure.

Those comments marked with an "***" are considered critical issues for resolution prior to EPA approval of the document. However, all our comments should be addressed prior to our receipt of the signature-ready copy of the ROD. Please contact me at (206) 553-7261, if you require clarification or elaboration on the comments provided.

Sincerely,

A handwritten signature in black ink, appearing to read "Wayne Pierre", is written over a horizontal line.

Wayne Pierre
Project Manager

Enclosure:

cc: Scott Reno, IDHW - Idaho Falls Office
Tally Jenkins, DOE-Id
Dean Nygard, IDHW

Enclosure

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
1. **	iv	Assessment ...	Language does not tract statutory language	Substitute "imminent and substantial endangerment" for "unacceptable risk or threat"
2. **		GENERAL	Global change needed on 10E-4 risk level to be consistent with the baseline risk assessment	Change "10 ⁻⁴ risk" to "1 x 10 ⁻⁴ risk"
3. **	iv	Tank Farm Soils ...	Need to identify "Principal Threat" wastes	Delete phrase "human health" in first sentence.
4.	v	Soils Under ... 2 nd Bullet	Change in the second sentence the word, "final" to "completed D&D"	
5. **	v	Other Surface...	a) Need to identify "Principal Threat" wastes b) We need to clarify what we mean by the term "equivalent protection." c) The last phrase, "...and the program performing the closure." is meaningless.	a) Substitute word "Principal" for word "primary" in first sentence. b) Insert, "to that afforded by the ICDF" after the words, "...equivalent protection..." Also, insert the phrase, "hazardous waste landfill closure" prior to the phrase, "...substantive requirements..." c) delete the phrase
6.	v	Other Surface... 1 st Bullet 1 st dash	Need to clarify the last phrase	after "... (DOE) ..." rewrite as follows: "...if determined to be more cost effective than maintaining necessary institutional controls to prevent potential future drilling through deep contamination zones and transporting contaminants into the underlying aquifer."

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7.	vi	Other Surface... 1 st bullet 1 st dash	Language may allow open-ended use of the ICDF for INEEL D&D wastes	Substitute the phrase, "Agencies' approved" for the word "stringent."
8. **	vi	Other Surface... 1 st bullet 4 th dash	Location of the ICDF, based on state concurrence concerns and available information should identify location in the CPP-67 Ponds	Should change to read, "... AOC within the western portion of the West CPP-67 Pond (Pond #2) and extending further west therefrom."
9. **	vi	Other Surface... 1 st bullet 5 th dash	The SSST facility is not a temporary facility, but may have satellite facilities associated with it.	Change section to read, "The design, construction and operation of a supporting waste (to include ICDF landfill leachate) storage, staging, sizing, treatment and pre-treatment facility in accordance with the substantive requirements of: This storage and treatment Unit will meet the design and performance criteria set forth at: 40 CFR§264.1052-1062; §264.1082-1088; §264.601; §264.221; §264.192; and the Idaho TAP. It is anticipated that this facility will consist of a storage/staging building; an evaporation surface impoundment; a waste shredder; solidification/stabilization treatment tanks; and associated equipment. In addition, the construction and operation of several satellite staging/accumulation areas for Group 3 soils in accordance with the substantive requirements of 40CFR §262.34."
10. **	vi	Other Surface... 1 st bullet 6 th dash	a) This unit is actually part of the SSST and should be covered under that topic.	Delete

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11. **	vii	Perched Water 2 nd Bullet	a) Need to address a DOE concern regarding the elimination of lawn irrigation b) Need deadline for closure of old ponds and start of new.	a) Change eliminate to "minimize recharge to underlying groundwater from lawn irrigation" b) Insert at end of last sentence, "and will be operational on or before December 2003"
12.	viii	Snake River... 1 st & 2 nd Bullets	Need to clarify these bullets.	Suggest as a lead in on page iv we emphasize that the action is bounded by the >MCL COC plumes for I-129, H-3 and Sr-90
13.	viii	Snake River... 5 th Bullet	The limit of \$2M budget and 12 month schedule cap on studies is arbitrary.	Insert the phrase, "It is estimated" at beginning of last sentence.
14. **	viii	Snake River... 6 th Bullet	a) Studies may involve non-traditional treatability studies b) Note: Comment also applies to bullet #4. We should consider the year 2095 as a not to exceed rather than an established date.	a) Delete the words, "treatability" and "exist" in the first sentence. b) Suggest we replace phrases like "after 2095" and "in the year 2095" with "by 2095"
15. **	viii	Snake River... New Bullet	Need to discuss how treated water will be managed.	Add, "Treated water will be returned to the aquifer through land recharge in accordance with the Idaho Wastewater Land Application ARAR's if a recharge impoundment is used or, in accordance with NPDES/SPDES ARAR's if the treated effluent is discharged to the Big Lost River which recharges the aquifer downstream of the INTEC facility."
16.	ix	SFE-20... 4 th Bullet	We should state that the wastes will likely be stored and possibly treated prior to off-site disposal.	Unless DOE has an alternate suggestion, we should identify that the wastes will be sent off-site to the AMWTF for storage and possible treatment prior to disposal at WIPP.

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17. **	ix		Need a section discussing "No Further Action Sites" as there are I.C. requirements for these sites and therefore, remedial action is being selected for the No Further Action Sites.	Insert, "NO FURTHER ACTION SITES Approximately 26 of the 99 sites addressed in this ROD are classified as <i>No Further Action</i> and require only institutional controls to remain protective. These controls will insure that the land remain industrial until at least 2095 at which time contaminant levels will be reduced sufficiently to be protective for residential use"
18. **	ix	Sites Managed...	Need to add a section on closed and closing RCRA/HWMA Sites	Language to be provided by the state. Major elements should include description of Old WCF, closure process, closure plan; RCRA/CERCLA Parity, Post closure to be managed under CERCLA ARAR process, etc.
19.	x	Statutory ...	Spell out "ARAR's"	
20.	x	Statutory ... 5 th Para.	Need to clarify the phrase, "assumed land use..."	Change to read, "Sites for which "No Further Action" determinations were made based on the land use assumption of industrial use through the year 2095 and residential thereafter, ..."

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
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21. **	ix	New Sites	<p>a) This section should not address 5 Year Reviews</p> <p>b) Should add discussion on maintenance and upgrade activities here</p>	<p>a) Delete bottom sentence</p> <p>b) "The INTEC facility is an operating facility. As such, periodic maintenance and upgrade activities will be conducted, during the implementation of the remedial actions under this ROD. Prior to conducting any site disturbance activities, the Agencies will be notified of the extent of any disturbance, and provided a plan for their approval, of necessary corrective actions and sampling that will be performed to insure that the remedies identified in this ROD remain operational and functional. The sampling plan will be of sufficient scope to provide data necessary to characterize the residual risk following any site disturbance. Depending upon the extent of the residual risk following site disturbance, the Agencies may elect to identify the disturbed area as a new site for follow-up remedial action. Depending upon the type and extent of contamination necessary remedial action would be conducted through either an ESD or Amendment of this ROD or under a subsequent INEEL ROD."</p>
22.	x	Statutory ... Last Para.	The discussion on maintenance and upgrade does not belong here	Delete last paragraph

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23. **	x	Statutory ... 6 th Para.	The 5-Year Review process also looks at whether remedial actions occur.	Change paragraph to read, "It is possible that new information will be discovered in the future, during routine operations, maintenance activities and/or D&D activities that will require additional remedial actions be taken at the sites listed in this ROD. The 5-year review process will ensure that remedial actions for these sites occur and ..."
24. **	xi	Statutory ... 1 st Para.	Future new sites are outside of this ROD. Disturbance of remedial action sites are prohibited without prior notice and concurrence of Agencies.	Rewrite 1 st para. "As INEEL is an operating facility, it is possible that changes in physical configuration of INTEC may uncover new sites or change the residual risk posed by those sites addressed under this ROD. Any planned disturbance at a site for which action is required under this ROD (including the No Further Action Sites) will be preceded by appropriate planning documents to be submitted to and concurred on by the Agencies prior to implementation. Newly discovered sites will be subject to remedial action pursuant to the terms and conditions of the Federal Facility Agreement and Consent Order."
25. **	xv	Signature sheet	Wrong name	
26. **	xvii	Signature Sheet	Wrong name	
27.	xxxi	CERCLA	formatting error	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
28. **	1-4	1.1 Last para	The statement about the AOC is inconsistent with background concentrations and the distinction between No Action & No Further Action Sites.	Action sites and cleanup levels are based on a $1 \times 10E-4$ carcinogenic risk. For Cs-137 this is $<3pCi/g$ for current residential use scenario. Background Cs-137 at INTEC is approximately $\sim 1pCi/g$ which is a $10E-5$ risk. The AOC cannot be identified as the $10E-6$ boundary. The acceptable residual risk for cleanup to future residential standards for Cs-137 is $1 \times 10E-4$ at the year 2095. No Further Action sites are sites that represent a threat if land use was residential but do not represent a threat under the industrial use.
29.	1-10	Figure 1-8	Include footnote that the I-129 MCL is $1pCi/l$	
30. **	1-13	Fig 1-11	The shaded area represents the $>18cpm$ level based on the RI/FS.	Indicate the $1 \times 10E-4$ cumulative increased carcinogenic risk level isopleth.
31.	2-2	2.2 1 st Para	The Track I & II recommendations address whether sufficient information exists to determine whether an unacceptable risk exists and necessary next steps.	
32. **	2-2	2.2 4 th Para	The NRRB recommended modifications to the FS and alternatives, especially concerning the Snake River Plain Aquifer and cost estimates.	Change to read, The Board recommended modifications to the Feasibility Study, concerning the Snake River Plain alternatives and the cost estimates. To support the Board's recommendations, a FS Supplement was written and published in 1998 (DOE-ID 1998a) "

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
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33.	4-1	4.1	Although somewhat redundant it would be clearer is the sites were listed under bullets and described as done for Group 2.	
34. **	4-2	Tbl 4-1 CPP 23	The injection well is not part of Group 5 as it is within the INTEC fence.	Should state, The SRPA plume which primarily resulted from the use of the injection well is under RD/RA. The injection well area within the INTEC fence line is under investigation in O.U. 3-14.
35.	4-7	4.1	Identify that the Tank Farm Soils are principal threat wastes due to the presence of significant levels of radionuclides.	
36.	4-7	4.2	Identify that the Group 2 Soils are not principal threat wastes due as the levels of radionuclides present have not been directly measured.	
37.	4-7	4.3	Although somewhat redundant it would be clearer is the sites were listed under bullets and described as done for Group 2.	
38.	4-9	4.6	If DOE is concerned about the safety risk of excavating CPP-84, those safety concerns should be summarized here.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
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39. **	4-10	4.8	A discussion is needed that the No Further Action Sites were determined to be protective under the current industrial and post year 2095 residential scenario. However, I.C.'s are required to insure that land use assumptions remain in place. In addition, if deep contamination (i.e., below residential basement default scenario) is suspected that may require I.C.'s to be protective, this would also qualify as a No Further Action Site.	The acceptable risk for No Further Action sites must be consistent with the acceptable residual risk for action sites. Therefore, sites which pose a current residential risk above 1×10^{-4} (and $HI > 1$) but not a post year 2095 residential risk would qualify as a No Further Action site. Additionally, sites with below basement level contamination could also qualify as a No Further Action requiring I.C.'s against drilling or excavation at depth. No Action sites are those sites where there are no site access or use restrictions necessary to be protective. Based on the ROD RAO's and RG's, Group 3 soils cleaned up to a 1×10^{-4} increased carcinogenic residual risk level (and $HI < 1$) do not require any access or use restrictions (assuming there is no deep contamination concerns).
40. **	4-10	§4.8	a) The use of 10^{-6} is inconsistent with the RAO's and does not define a No Further Action Site at INTEC due to background Cs-137 levels. b) The description on No Action and No Further Action Sites needs clarification	a) The acceptable risk for No Further Action sites must be consistent with the acceptable residual risk for action sites. Therefore, sites which pose a current default residential cumulative increased carcinogenic risk above 1×10^{-4} (and $HI > 1$) but not a post year 2095 residential risk would qualify as a No Further Action site. Additionally, sites with below basement level contamination could also qualify as a No Further Action requiring I.C.'s against drilling or excavation at depth. b)

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41.	4-10	4.8.1	a) It would be clearer if the letters "NA" or "NFA" were inserted in brackets after the site identifier.	
42. **	4-10	4.8.1.1	How can a site be classified as a No Further Action Site due to limited data? How/when will this data gap be filled?	The site is either a No Action Site or outside the ROD.
43. **	4-11	4.8.1.5	Limited characterization data does not lead to a No Further Action decision.	
44.	4-11	4.8.1.8	We need to clarify that acceptable risk would be for current industrial use.	
45.	4-12	4.8.1.12	Need to add that I.C.'s are required to prevent future deep excavations.	
46. **	4-12	4.8.1.14	This site should be divided into two components. The pit covered by asphalt has no data supporting a risk-based decision.	The remaining covered pit may be better classified as a Group 2 site or dropped from this ROD.
47. **	4-13	4.8.1.15	Limited characterization data does not lead to a No Further Action decision.	

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#	Pg.	Sect.	Concern	Suggested Change
48. **	4-13	4.8.1.16	Limited characterization data does not lead to a No Further Action decision.	
49. **	4-13	4.8.1.17	Limited characterization data does not lead to a No Further Action decision.	
50.	4-13	4.8.1.18	Does the continued existence of a source represent a current or future use or access restriction? If not the site is a No Action site. If yes, then necessary I.C.'s need to be identified.	
51.	4-13	4.8.1.19	Does the continued existence of a source represent a current or future use or access restriction? If not the site is a No Action site. If yes, then necessary I.C.'s need to be identified.	
52.	4-13	4.8.1.20	Does the continued existence of a source represent a current or future use or access restriction? If not the site is a No Action site. If yes, then necessary I.C.'s need to be identified.	

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#	Pg.	Sect.	Concern	Suggested Change
53. **	4-14	4.8.1.21	A 1ppm PCB concentration may be actionable depending on whether the value is the 95%UCL or maximum concentration. Also, the unrestricted use PCB level is found at 40 CFR §761.125. This level is 1ppm not 25ppm. How does this site meet the Group 3 RAO's & RG's.	
54. **	4-14	4.8.1.24	Does the continued existence of a source represent a current or future use or access restriction? If not the site is a No Action site. If yes, then necessary I.C.'s need to be identified.	
55. **	4-14	4.8.1.25	Does the continued existence of a source represent a current or future use or access restriction? If not the site is a No Action site. If yes, then necessary I.C.'s need to be identified.	
56. **	4-14	4.8.1.26	The residual risk supports a No Action decision if the risk is to a current or future unrestricted residential use.	

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#	Pg.	Sect.	Concern	Suggested Change
57. **	4-14	4.8.1.27	Does the continued existence of a source represent a current or future use or access restriction? If not, the site is a No Action site. If yes, then necessary I.C.'s need to be identified. Limited characterization data does not lead to a No Further Action decision.	
58. **	4-15	4.8.1.28	What is the residual risk and does it support a No Action decision if the risk is to a current or future unrestricted residential use.	
59.	4-15	4.8.1.30	It appears that the residual risk supports a No Action decision depending upon the method detection limits and the land use scenario evaluated.	
60.	4-15	4.8.1.31	The residual risk supports a No Action decision if the risk is to a current or future unrestricted residential use.	
61.	4-15	4.8.1.33	Limited characterization data does not lead to a No Further Action decision.	
62.	4-16	4.8.1.37	It appears that the residual risk supports a No Action decision depending upon the method detection limits and the land use scenario evaluated.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
63.	4-16	4.8.1.38	From the write-up, it appears that the residual risk supports a No Action decision depending upon the method detection limits and the land use scenario evaluated.	
64.	4-17	4.8.1.33	Limited characterization data does not lead to a No Further Action decision.	
65. **	4-17	4.8.1.40	The AOC represents the >18cpm level based on the RI/FS. The detection of Cs-137 levels in this area at a kriged value of 11pCi/g, is supported. It is not clear if this level is at the 95%UCL. However, it is clearly above the current residential risk level and is the basis for the No Further Action determination.	
66. **	4-20	4.10.2	There is nothing said about COCs to support the conclusion that the site is not a significant source of contamination.	
67. **	4-20	4.10.3	Since CPP-66 is of concern only due to ecological screening and is transferred to 10-04, any Five Year Reviews would be outside this ROD.	Delete the last sentence.

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#	Pg.	Sect.	Concern	Suggested Change
68.	5-1	5.1	Include information stating that the northern portion of the INTEC facility lies within the 100 year flood plain.	
69.	5-2	Figure 5-1	<p>a) typographical on cross section</p> <p>b) The cross section appears to add to the confusion concerning recharge as it appears that the Big Lost River is not a source of recharge based on the figure. At a minimum, we would expect the sediment to be saturated under the Big Lost River & Percolation Ponds</p>	<p>A) Switch A and A'</p> <p>b) Include a footnote identifying that the figure does not depict saturated sediment nor fractured basalt seepage paths beneath surface water features like the Percolation Ponds and Big Lost River.</p>
70. **	5-5	5.2 6 th Para	This discussion needs to address future groundwater ingestion. The discussion on the INEEL boundary address the fact that the plume does not present a threat to off-INEEL drinking water users.	
71.	5-6	Figure 5-3	Include footnote indicating that 20,000pCi/l is the MCL for tritium.	
72.	5-7	Figure 5-4	Include footnote indicating that 8pCi/l is the MCL for Sr-90.	

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73. **	5-8	5.3 GENERAL	a) For each of the Groups discussed it is important to identify whether the Group or selected O.U.'s under a Group contain "Principal threat" or "low level threat wastes."	
74.	5-9	5.3.1.3	Typographical error	Change "2B4R/hr" to 2 x 10E+4 R/hr"
75. **	5-10	Table 5-2	<p>a) Need to depict data in terms of RME intake. Add a column listing the 95%UCL value which is the arithmetic mean plus 2X sigma.</p> <p>b) Unclear if background values listed are arithmetic mean or represent a confidence level.</p>	<p>a) Add a column listing the 95%UCL value which is the mean plus 2X standard deviation.</p> <p>b) Include footnote</p>
76.	5-14	5.3.1.10 Last 2 Para.	<p>a) These appear to be summary statements and should be under a Summary Section for Group I.</p> <p>b) Mention should be made of the listed wastes that may be associated with the spills.</p> <p>c) Substitute the term "principal threats" for "principal risks."</p>	
77.	5-15	CPP-89...	No foundation is provided to support the use of the phrase, "minor increased groundwater risk."	Delete the word, "minor."

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#	Pg.	Sect.	Concern	Suggested Change
78.	5-16	Table 5-3	Same concerns as discussed for Table 5-2 above.	
79.		Sect 5 Tables in General	Same concerns as discussed for Table 5-2 above.	
80.	5-43	5.3.3.14	Concerning the mercury risk-based soil cleanup number, it should be mentioned that this number is for residential, non-carcinogenic effects.	
81. **	5-69	5.3.4	A paragraph should be added referring back to Table 5-1 and reaffirming that the perched water exists primarily due to INEEL operations. If INEEL operations were to cease in the future, the perched water would not represent a usable aquifer for future water users.	
82.	5-69	5.3.4.1 2 nd Para	typographical in second sentence	

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#	Pg.	Sect.	Concern	Suggested Change
83. **	5-71	5.3.5	<p>a) We need to add a table depicting typical waste discharges to the ICPP injection well.</p> <p>b) Need to add a figure showing the locations of the monitoring wells used in the RI/FS to evaluate Group 5.</p> <p>c) Need to add a table listing summary sampling results statistics for SRPA monitoring.</p>	
84.	5-73	5.3.5.5 2 nd Para	The last sentence needs editing.	
85. **	5-73	5.3.5.6 2 nd Para	The ROD needs to fully summarize the data on which the decision is based and minimize reference to the RI/FS. This is especially true as Figure 5-4 depicts the Sr-90 plume.	Reduce references to RI/FS in favor of inclusion of a figure or table.
86. **	6-2	6.2	We need to be consistent on whether we are applying a 100 year future residential or a year 2095 future residential.	For consistency, we should use the Year 2095 future residential scenario.
87. **	7-1	7.1	A brief discussion on how risks were calculated to include a table of the default parameters and land use scenarios used should be included here	

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88.	7-1	7.1.1.1	<p>a) Need to provide a synopsis of what the PRG's were and how selected.</p> <p>b) Table 5-51 should be included in the ROD rather than referenced.</p>	<p>a) As an example, if PRG's represented the 10E-6 residential soil screening levels established in the EPA Region 3 or Region 9 guidance, this should be stated along with a clarification that these levels were appropriate due to the background soil contaminant levels which represent a 10E-6 cumulative increased carcinogenic risk.</p> <p>b)</p>
89.	7-2	7.1.1.2 1 st & 2 nd Para	The ROD needs to fully summarize the data on which the decision is based and minimize reference to the RI/FS.	Reduce references to RI/FS in favor of inclusion of a figure or table.
90.	7-2	7.1.1.3	The ROD needs to fully summarize the data on which the decision is based and minimize reference to the RI/FS.	Reduce references to RI/FS in favor of inclusion of a figure or table.
91.	7-5	7.1.4.3	The ROD needs to fully summarize the data on which the decision is based and minimize reference to the RI/FS.	Reduce references to RI/FS in favor of inclusion of a figure or table.
92.	7-6	Tbl 7-2	Typographical for NSR. Correct footnote is "c" not "b"	
93. **	7-6	Tbl	A table should be included listing the human health risks for each of the Group sites as was done cumulatively in Table 7-2.	

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94. **	7-8	7.2.1	The ROD needs to fully summarize the data on which the decision is based and minimize reference to the RI/FS.	Provide a description of the screening level ecological risk assessment. Also, include a table listing flora and fauna of potential concern in and around INTEC at INEEL. At a minimum, this information is available from recent EIS's and should include the following fauna: peregrine falcon; bald eagle; Merriam Shrew; and long-billed curlew; and flora: Lemhi milkvetch; Winged-seed evening primrose; Sepal-tooth dodder; and Spreading Gilia.
95.	7-8	7.2.2	The ROD needs to fully summarize the data on which the decision is based and minimize reference to the RI/FS.	Reduce references to RI/FS in favor of inclusion of a figure or table.
96.	7-10	7.2.5 1 st Para	The ROD needs to fully summarize the data on which the decision is based and minimize reference to the RI/FS.	Reduce references to RI/FS in favor of inclusion of a figure or table.
97. **	7-10	7.2.5 3 rd Para	A discussion is needed reemphasizing that the screening approach resulted in establishing conservative risk assumptions and that the actions undertaken at sites CPP-44, CPP14 and CPP-55 is based on the small volume of COC contaminated material and the cost benefit of action now vs. further study under WAG 10.	
98. **	7-11	Tbl 7-3	Change title to indicate that the listed sites <u>may</u> present an unacceptable risk.	

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99.	8-1	8	The definition of RAO's should include language from the NCP.	Remedial Action Objectives specify contaminants and media of concern, potential exposure pathways and remediation goals. Remediation goals establish acceptable exposure levels that are protective of human health and the environment. Factors to be considered in establishing RG's are outlined at 40 CFR §300.430(e)(2)(i).
100. **	8-4	Tbl 8-1	<p>a) The ecological remediation goals listed derive from an ecological screening evaluation and may not be necessary to meet environmental protectiveness. Action is being taken for convenience of the Agencies, only.</p> <p>b) The use of 3ppm as a soil-based human health RG is inconsistent with the use of the EPA Region 3 screening guidance, which is 23mg/kg residential soil ingestion. If crop uptake assumptions are being made to support this RG, then Section 7.1.2.3 needs to be expanded to include a discussion of this. Further, the proximity of CPP-93 to the Tank Farm and Calciner Bins do not support a residential/home grown produce scenario at this site.</p>	<p>a) Delete the ecological-based RG's from the table and move to narrative with the statement that these levels are being used due to the small volume of the sites and the cost effectiveness of action vs additional study.</p> <p>b) A decision to manage CPP-93 at a RG of 3ppm, as a Group 3 site requiring excavation and disposal in the ICDF, should await the WAG 10 plant uptake treatability study and a decision on the closure approach to be taken at the Tank Farm and Calciner Bins. An alternate approach is to address the site in two stages. First, remove mercury at a soil ingestion RG of 23mg/kg. Second, through 5-Year Reviews, evaluate whether additional soil excavation is required to be protective depending upon new information that becomes available.</p>

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101.	8-6	8.1.2	The RG's stated should be rephrased to read more like goals than specific solutions.	Suggest instead of posting signs, the goal is warning current users. The discussion on the floor is minimize infiltration. Upgrade drainage is minimize run-on.
102. **	8-8	Oper. Req. #5	Wastes other than soils will be disposed of in the ICDF. Need to expand citation to 40 CFR 268.	
103. **	9-3	9.3	We need to reassert that the ecological sites are being cleaned up under the screening action levels due to their small size and the cost-benefit of not pursuing further study on them.	
104.	9-6	9.5.1.3	Ion exchange is not the most likely treatment technology. It was the technology selected for cost estimating purposes.	
105. **	10-2	GENERAL on short term effect.	For each Group evaluation need to discuss the time until protection is achieved per the NCP.	
106.	10-10	10.5.1	Include an example I-129 isopleth map for the year 2095 here to support modeling prediction	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
107. **	10-11	10.5.6	This discussion focuses on ion exchange resin technology. However, evaporation is a viable option. Further, the discussion should focus on whether we can pump cost-effectively to remove the hot spot(s).	
108.	10-15	10.7.5 2 nd Para	Need to define shortest time by stating the number of years.	
109. **	11-1	11.1 2 nd Para.	Include a discussion on the "INEEL Land Use Plan" and its use as a tracking mechanism to identify all CERCLA land areas under restriction or control.	Add sentences prior to the last sentence in the paragraph as follows, "The INEEL Land Use Plan will serve as the tracking mechanism to identify, at a minimum, all CERCLA land areas at INEEL under restriction or control. This Planning document may itself become a part of an INEEL Stewardship Plan or equivalent, but any modifications to the INEEL Land Use Plan will be consistent with the requirements of this ROD.
110. **	11-1	11.1 2 nd Para	<p>a) EPA Region 10 policy requires an I.C. Monitoring report within 6 months of the ROD and annual thereafter.</p> <p>b) We need to expand the discussion on exposure threat for clarity.</p>	<p>a) Add the following prior to the last sentence and after the suggested change to this paragraph listed above, "Periodic monitoring reports will be prepared as part of the RD/RA submissions, in compliance with the EPA Region 10 Policy on the use of Institutional Controls at Federal Facilities. The first Monitoring Report will be submitted as a part of the RD Work Plan, which will be submitted within 6 months of ROD signatures."</p> <p>b) We should add that the exposure threat would be to unauthorized trespassers if current DOE radiological site controls were no longer applied.</p>

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
111. **	11-1	11.1 3 rd Para	Delete discussion on temporary units.	
112. **	11-2	Tbl 11-1 GENERAL	Under "Controls" heading for each discussion concerning the INEEL Land Use Plan, we need to identify what the controls are in addition to publishing surveyed boundaries.	Add, as a global change in table, after phrase "...surveyed boundaries..." the phrase, "... and description of controls, ..." and before phrase, "...in INEEL..."
113.	11-2	Tbl 11-1 GENERAL	Under "Controls" heading for each discussion on Notice, we need to address notice of anticipated change in land use designation, restriction, land users or activities.	Add a global change in table after the statement, "Notice to affected Stakeholders." the phrase, "... (e.g., BLM, F&W, local county governments; state & EPA), including Notice of any change in land use designation, restriction, land users or activities."
114.	11-8	11.1.1	Should restate why the alternative is the best remedy.	
115.	11-9	11.1.2	Should restate why the alternative is the best remedy.	
116. **	11-9	11.1.2 1 st Para	Need to identify specific action levels for Group 2 soils.	Change 7 th & 8 th sentences to read, "... However, upon completion of D&D, an evaluation will be performed by the Agencies to determine if the soils to a minimum depth of 10ft bgs, contain contaminants exceeding the action levels specified in Table 8-1 of this ROD. If these action levels are exceeded, then the Agencies will either cap these soils in place in compliance with the hazardous waste landfill closure substantive requirements or excavate and manage these soils as a Group 3 soil, as described below. ..."

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
117.	11-9	11.1.3 2 nd Para	a) Change the word "alternative" to "selected remedy." b) Need to add the Declaration bullets concerning the ICDF here to be consistent.	
118.	11-10	11.1.3 2 nd Para	We should restate that the ICDF will be designed to function as an INEEL-wide CERCLA on-site disposal facility. Also, associated with the ICDF will be a Staging, Storage, Sizing and Treatment Facility to prepare wastes as necessary for disposal in the ICDF.	
119. **	11-10	11.1.3	A description of the SSST is required here. The description should include the major components of the SSST and the types of wastes that will be handled, e.g., ICDF leachate, SFE-20 demolition debris, etc.	
120.	11-11	Fig 11-1	Need to depict the cap in the schematic	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
121. **	11-11	11.1.3 Para >1 st set of Bullets	There is no reason to discuss the specifics of the alternate locations evaluated. Rather, discuss that the proposed location was subjected to a preliminary evaluation and that the area to the west of the CPP-67 ponds was found to be suitable for siting the ICDF. This should be followed by a statement that a detailed geotechnical evaluation will be conducted as part of the RD/RA process to identify the specific footprint location of the ICDF.	
122.	11-12	11.1.3 Para >2 nd set of bullets	It should say that Figure 11-3 shows the selected area that the ICDF is proposed to be sited in.	
123.	11-12	11.1.4	Should restate why the alternative is the best remedy.	
124. **	11-13	Fig 11-2	Wrong figure is depicted.	Replace this figure with the hierarchy graph.
125. **	11-14	Fig 11-3	The general area needs to include the western portion of the West CPP 67 Pond.	
126.	11-16	11.1.4 3 rd Para	Change the word "groundwater" to "drinking water"	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
127.	11-16	11.1.5	Should restate why the alternative is the best remedy.	
128. **	11-16	11.1.5 2 nd Bullet	We should add here that the 0.5gpm is considered the minimum drinking water yield necessary for the aquifer to serve as a drinking water supply.	
129. **	11-20	Fig 11-5	Flow chart needs to be revised	See figure attached to these comments.
130. **	11-19	11.1.5.2 4 th Para	The action level and yield are not interdependent considering the monitoring well installation and sampling plan is not yet developed. The modified flow. chart (enclosed) shows the process adequately.	Delete the phrase, "...and that the groundwater delivered to the surface (i.e., at the wellhead) exceeds action level(s)."
131.	11-21	11.1.5.4	Typographical?	
132.	11-23	11.1.7	Should restate why the alternative is the best remedy.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
133. **	11-24	11.1.9 1 st Para	<p>a) Substitute the phrase, "at levels that do not allow unlimited or unrestricted current or future use" for the phrase, "...at greater 10E-4 risk..."</p> <p>b) Need to add discussion on I.C.'s and Five Year Review.</p>	<p>a)</p> <p>b) Add a new sentence, "Prior to each O.U. 3-13 5 Year review, DOE-ID will submit a written evaluation to the state and EPA concerning the effectiveness of the remedial actions specified in this ROD to include the effectiveness of institutional controls. The content of this written evaluation will be described in the RD/RA documents submitted pursuant to the FFA/CO. However, as concerns institutional controls, this report, at a minimum, will summarize the results of the periodic institutional control monitoring reports and include a description of a walk-through of the areas subject to institutional controls conducted just prior to the submittal of each 5-Year review written evaluation."</p>
134. **	11-25	GENERAL on Cost Tbls	Need to add the costed O&M period, the discount rate, and the fact that the estimates are -30% to +50% estimates.	
135.	12-1	12.1.2	Need to discuss how Institutional Controls will be tracked.	Add a sentence stating, "Institutional Controls will be tracked through the INEEL Land Use Plan."
136. **	12-1	12.1.2	We need to clarify that No Further Action Sites are sites where remedial action is being undertaken. However, the only action is Institutional Controls.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
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137. **	12-2	12.1.2 Last Para	Institutional controls are maintained until the site no represents an unacceptable risk to human health or the environment. Perception of risk is not a factor for this.	
138.	12-2	12.1.3	Need to summarize why is this the best remedy	
139.	12-2	12.1.4	Need to summarize why is this the best remedy	
140.	12-3	12.1.5	Need to summarize why is this the best remedy	
141.	12-6	12.1.7 Top Para	Add after Idaho groundwater quality standards, "and federal MCL's."	
142.	12-6	12.1.9	Need to summarize why is this the best remedy	
143. **	12-8	12.2 4 th Para	Contaminated soil generated during non-ROD maintenance activities are not CERCLA remediation wastes unless DOE chooses to perform a removal activity.	
144. **		GENERAL on TbIs	Add IDAPA citations with federal in parenthesis where state has primacy.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
145. **	12-9	GENERAL on Tbls	40 CFR 264.552, 553 & 554 do not provide any protection from LDR requirements. Benefits that may be available under 40 CFR 264 Subpart S is already available as this is a CERCLA action within an AOC. Also, due to release potential, remediation waste piles may not meet project safety concerns.	For accumulation areas, it may be best to cite the substantive requirements of 40CFR 262.34(a)(1)(i)-(iv) as an ARAR.
146.	12-10	12.2.1.1 5 th Para	See discussion above on Temporary Units.	
147.	12-10	12.2.2.1 2 nd Para	Insert the phrase, "hazardous waste" before "...landfill closure..."	
148.	12-12	Tbl 12-2	The chemical specific ARARs cited are only applicable for "off-site" waste management.	
149.	12-13	12.2.2.2	This should be clarified to read that this applies to newly generated hazardous waste contaminated soils. Soils that are only being consolidated within the AOC are not subject to RCRA hazardous waste characterization, but would be subject to Waste Acceptance Criteria evaluation if disposed of in the ICDF.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
150.	12-13	12.2.3	It would be advisable to summarize the RCRA status of the Group 3 soils here. For example, CPP-92, and CPP-97 thru 99 are boxed mixed low level contaminated soils.	
151.	12-14	Tbl 12-3	The 40CFR262.11 information needs editing.	The requirements are applicable for wastes that leave the AOC.
152.	12-14	Tbl 12-3 Chem Spec	a) 40 CFR261.20-.24 is applicable for soils that are not merely consolidated but pass through a storage or treatment unit. b) 40CFR761 should be added to address potential PCB wastes.	
153.	12-15	Tbl 12-3 Alt 4A	These ARARs relate to the ICDF. The comments on site security, general inspection & personnel training applies. If we want to clarify that those ARARs apply even for sites not consolidated but capped in place, we should say so.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
154.	12-17	Tbl 12-3	Need to add ARARs for the SSST and satellite accumulation areas here.	Need to add that the SSST Unit will meet the design and performance criteria set forth at: 40 CFR§264.1052-1062; §264.1082-1088; §264.601; §264.221; §264.192; and the Idaho TAP. The comments should identify the basic components, i.e., a storage/staging building, an evaporation surface impoundment, a waste shredder; solidification/stabilization treatment tanks and associated equipment. Also, identify the construction and operation of several satellite staging/accumulation areas in accordance with the substantive requirements of 40CFR §262.34."
155. **	12-16	Tbl 12-3	40CFR264.309(a)&(b) and 264.310 requirements are applicable.	
156. **	12-17	Tbl 12-3	The action specific ARARs are applicable	
157. **	12-17	Tbl 12-3	Need to add ARARs for the SSST here.	Need to add that the SSST Unit will meet the design and performance criteria set forth at: 40 CFR§264.1052-1062; §264.1082-1088; §264.601; §264.221; §264.192; and the Idaho TAP. The comments should identify the basic components, i.e., a storage/staging building, an evaporation surface impoundment, a waste shredder; solidification/stabilization treatment tanks and associated equipment.
158. **	12-19	12.2.3.1 2 nd Para	If wastes are treated to meet the waste acceptance criteria for the ICDF, placement would be triggered and LDR treatment would be required.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
159. **	12-19	12.2.3.1 4 th Para	Need to delete discussion on Temporary Units. Also, the SSST is not a site under the FFA/CO it is part of the remedial action.	
160. **	12-19	12.2.3.1 5 th Para	LDR's do apply to sites CPP-92, -97, -98, and -99 as these are storage units.	
161. **	12-20	12.2.3.2	The concept of AOC applies only to RCRA not TSCA wastes.	
162.	12-20	12.2.3.3	Typographical error. Need to provide proper citation as 40CFR761.75(b)(1).	
163.	12-23	12.2.4.1	Need to add a discussion that the Agencies have not performed the analyses required under 40CFR 230.10 & .11 and that prior to any stream alteration, the Agencies will provide their evaluation to the public via a Fact Sheet and ESD.	
164. **	12-24	Tbl 12-5	IDAPA 16.01 requirements are applicable.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
165. **	12-26	12.2.5.1 6 th Para	We probably need to beef up this language to avoid future misunderstandings concerning what is implied here.	Suggest, "Based on ..., hazardous waste and hazardous constituents are not present outside the INTEC fence line at concentrations above risk-based or regulatory concern. Therefore, contaminated SRPA groundwater outside the fence line has been determined to not contain RCRA/HWMA hazardous wastes. If in the future, RCRA/HWMA hazardous constituent concentrations are found in the groundwater outside the INTEC fence line, above federal MCLs or Idaho Drinking Water Quality Standards, this determination will be revisited."
166.	12-26	12.2.5.2	The discussion on reinjection is not appropriate as reinjection of radionuclides may be inconsistent with IDAPA requirements and prevent remedy implementation.	Add, "Treated water will be returned to the aquifer through land recharge in accordance with the Idaho Wastewater Land Application ARAR's if a recharge impoundment is used or, in accordance with NPDES/SPDES ARAR's if the treated effluent is discharged to the Big Lost River which recharges the aquifer downstream of the INTEC facility."
167.	12-29	Tbl 12-6 Chem Spec	Should just cite 40CFR §261 here.	
168. **	12-30	12.2.6.1	The Off-Site Rule applies to both hazardous and solid wastes.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
169. ** 170.	12-30	12.2.7.1 3 rd Para	The status of the SFE-20 tank system needs to be clarified here to support an argument that this is part of a landfill consolidation and not movement from a tank storage unit to the ICDF. Also, given the tank's contents, pre-treatment will be required which will trigger placement making the paragraph unnecessary.	Suggest that we identify that the tank system and tank contents will be treated in the SSST.
171. **	12-31	Tbl 12-7	a) LDR's appear to be applicable b) If the SSST is used to manage the wastes Subpart X need not be listed here.	
172. **	12-32	Tbl 12-7	Probably no reason to provide another listing of ARARs for off-site, especially as the AOC argument is not supportable and off-site activities require full compliance with local, state and federal rules.	
173.	12-34	12.2.7.3	There are no location-specific ARARs for this Group if SSST is used.	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
174. **	12-34	12.3	We need to state the NCP language that each remedial action selected was cost-effective in that the costs were determined to be proportional to the overall effectiveness and that each remedial action was determined to adequately protect human health and the environment and comply with ARARs.	
175. **	12-35	Tbl 12-8	In the footnote identify the discount factor used to calculate the NPV.	
176.	12-35	12.3.3	Typographical error. Change 4B to 4A in next to last sentence.	
177. **	12-37	12.4 2 nd Para	It is incorrect to state that effective treatment technologies do not exist for radionuclides. We do have the ability to reduce mobility and volume for selected radionuclides. We should state that cost-effective technologies do not exist for treatment of the Cs-137 and Sr-90 contaminated soils.	
178.	12.38	12.5	a) Identify Principal Threat wastes in 1 st paragraph. b) Delete the word "offsite" in the 1 st sentence, 3 rd paragraph.	a) Suggest adding after second sentence in first paragraph, "The Group 1, 2 & 3 radiologically contaminated soils which represent principal threat wastes will not be treated under this action."

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
179. **	12-39	12.6	Add the following sentence, "As part of our 5-Year Review process, we will periodically review the protectiveness of our decisions and adjust to updates in published protectiveness levels."	
180. **	13-2	13.2	Delete the word "presumptive" as nothing was done in the RI/FS to support this approach. It is simpler to state that the sites will be managed as a Group 3 soils site.	
181.	13-2	13.3	"WLAP" is not a listed acronym	
182.	13-3	CPP-48	It is unclear how our action will simplify the administrative closure.	Delete the word "administrative"
183. **	13-3	2 nd bullet	Need to change to state that the proposed location for the first cell is the western portion of the west CPP-67 pond extending west therefrom.	
184. **	13-3	last bullet	Delete	
185. **	13-4	1 st Bullet	Delete	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
186. **	13-3	13.3	a) Need to discuss the SSST facility which was not in the Proposed Plan	a) Approach would be to describe that the SSST is necessary to facilitate operation of the ICDF.
187.	App A	GENERAL	The Responsiveness Summary needs to be tech edited.	
188.	A-2	1 st Response	Acronym FD-EIS not listed	
189.	A-10	Comment 29	We should add the phrase, "...not just formal recommendations" for clarity here.	
190.	A-10	Response to 29	We have only completed a portion of the evaluation which is included in the ROD	
191.	A-21	Response to 71	The response does not read as responsive to the comment.	We should affirm that remediation of the Group 7 SFE-20 Tank system will be completed well before the HLW tanks.
192.	A-28	Response to 86	Typographical in last sentence	
193.	A-29	Response to 89	The CPP-92 is also subject to RCRA storage ARARs.	
194.	A-76	Response to 213	The response doesn't address the comment	

COMMENTS ON DRAFT FINAL O.U. 3-13 ROD				
#	Pg.	Sect.	Concern	Suggested Change
195.	A-78	Response to 217	We have not done any work to delineate the 500yr flood plain and need to be careful what we are saying here. We can and should agree to consider engineering the cover to withstand a 500 yr flood event. We are not using the 500yr flood plain as a siting criterion; however.	
196. **	A-80	1 st Response	The ICDF leachate is by definition a hazardous waste, F039. At a minimum 40 CFR §268 Subpart D standards would apply. ICDF leachate will need to be managed in the SSST. Treated effluent may be usable for dust suppression.	
197. **	App B		This list is not comprehensive. The Administrative Record includes public meeting transcripts, public comment letters, track I & II investigations, Initial Assessments; EDF's, etc.	

New Figure 11-5 **

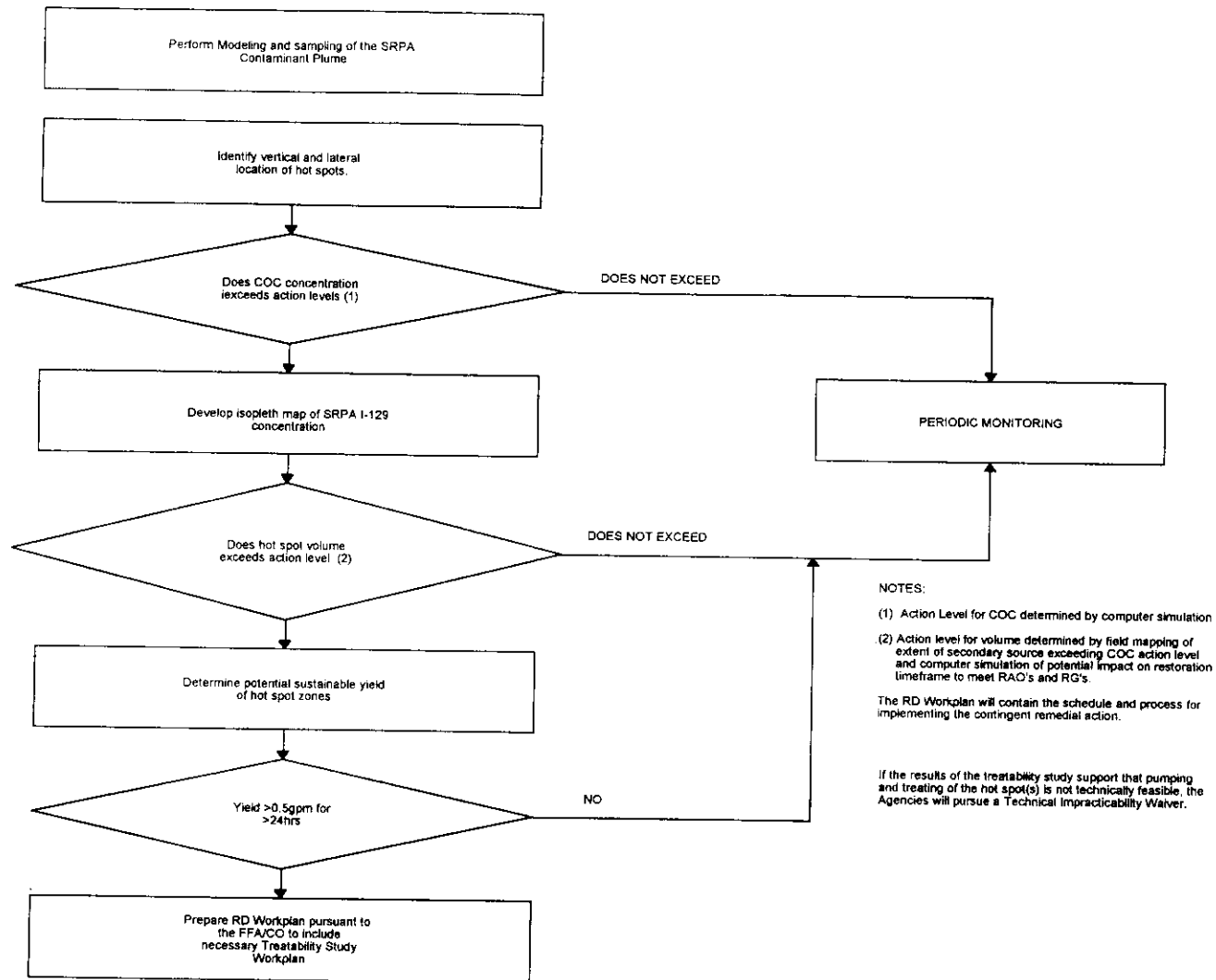


Figure 11-5. SRPA contingent remediation flowchart